

Network

TNM-XNF9013EPT3-Z

Explosion-proof Fisheye Camera

Key Features

- AI Technology Classified Object Type: Person/Face/Vehicle/License Plate
- Support Detection Shot
- Object Detection - Virtual Line (Crossing Detection), Virtual Area (Loitering/Intrusion/Enter/Exit) Stereographic Type Fisheye Lens
- Extreme WDR (2MP@60fps) By Scene Analysis And Local contrast Enhancement
- WiseNR-, Auto Prefer Shutter Control Based On AI
- WiseStream

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Explosion-proof Fisheye Camera



Specifications

Video

Imaging Device	Size	1/2.3"
	Type	CMOS
Resolution		3584x2688, 3584x1792, 3584x896, 3008x3008, 2864x1124, 1920x960, 1920x480, 1792x1344, 1792x896, 1504x1504, 1080x1080, 1024x768, 960x960, 800x600, 768x768, 720x720, 704x576, 640x640, 640x480, 640x320, 640x160, 480x480
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.39
	BW(1/30sec, 30IRE)	0.039
Video Out		CVBS: 1.0 Vp-p / 75Ω composite for installation, USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focal Length (mm)		1.08
Max Aperture Ratio (F number)	Wide	2.2
Angular Field of View	Horizontal	209°
	Vertical	83°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Fixed
Lens Type		Fixed iris

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Rotate	355°

Operational

Day & Night		Auto(ICR)
Backlight Compensation		BLC, HLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones

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Operational

Privacy Masking	Quantity	32ea
	Shape	Polygonal zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic
Gain Control		Off, Max gain, Manual
White Balance		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	1/5~1/12,000sec
Video Rotation		Flip, Mirror
Alarm Interface	In/Out	2 configurable I/O ports
Alarm Triggers		Analytics, Network disconnect, Alarm input
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback
Audio In		Selectable(mic in/line in), Built-in mic
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 8m(26.25ft)(PoE), 13m(42.65ft)(PoE+)

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Vehicle	Type(car, bus, truck, motorcycle, bicycle)
Thumbnail		DetectionShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)
	Normal	Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap

Network

Ethernet	Metal shielded RJ-45(10/100BASE-T)
Video Compression	H.265: Main, H.264: Main/Baseline/High,MJPEG
Audio Compression	G.711 u-law /G.726 selectable,G.726(ADPCM) 8kHz,G.711 8kHz, G.726: 16kbps,24kbps,32kbps,40kbps, AAC-LC: 48kbps at 16kHz
Smart Codec	Manual, WiseStreamIII
Bitrate Control	H.265/H.264: CBR or VBR, MJPEG: VBR

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Network

Streaming	Unicast	Up to 20 users
	Multicast	Support
	Multiple Streaming	Up to 10 profiles
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), PIM-SM
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Optional (needs gateway)

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	TPM(Trusted platform module), HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256)
Security Certificate	TPM 2.0 with FIPS 140-2 level2

General

Memory	RAM	4GB
	Flash	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 512GB x 2slot(Total 1TB)

Environmental & Electrical

Operating Condition	Temperature	-40°C~+60°C(-40°F~+140°F)
	Humidity	0~95% RH(non-condensing)
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3), PoE+(IEEE802.3at, Class4), 12VDC
Power Consumption	PoE	PoE mode: Max 12.95W,typical 9.4W, PoE+ mode: Max 23.0W,typical 9.4W
	12VDC	PoE mode: Max 12.9W,typical 9.0W, PoE+ mode: Max 22.0W,typical 9.0W

Mechanical

Color	Orange

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Mechanical

Material	Aluminum
RAL Code	RAL2000-Yellow Orange
Product Dimensions	ø218.4x292.6mm(ø8.60x11.52")
Product Weight	8.61kg (19lbs)

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC/EN 63000, IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	34.9m (114.49ft)
Observe (63PPM/ 19PPF)	Wide	13.9m (45.60ft)
Recognize (125PPM/ 38PPF)	Wide	7.0m (22.96ft)
Identify (250PPM/ 76PPF)	Wide	3.5m (11.48ft)

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